

CLAIMS

- [1] A therapeutic agent for periodontal diseases which comprises a neurotrophic factor as an active ingredient.
- [2] The therapeutic agent according to Claim 1 which
5 regenerates the periodontal tissue.
- [3] The therapeutic agent according to Claim 1 or 2 which regenerates the cementum.
- [4] The therapeutic agent according to any one of Claims 1-3 which regenerates the periodontal ligament.
- 10 [5] The therapeutic agent according to any one of Claims 1-4 which regenerates the alveolar bone.
- [6] The therapeutic agent according to any one of Claims 1-5 which prevents the apical invasion of gingival epithelium along the dental root surface.
- 15 [7] The therapeutic agent according to any one of Claims 1-6 which regenerates the dental pulp.
- [8] The therapeutic agent according to any one of Claims 1-7 which enhances the production of repaired dentin in the pulp cavity.
- 20 [9] The therapeutic agent according to any one of Claims 1-8, wherein the neurotrophic factor is a brain-derived neurotrophic factor, a nerve growth factor, neurotrophin-3, or neurotrophin-4/5.
- [10] A transplant for periodontal tissue regeneration
25 which comprises a neurotrophic factor.
- [11] The transplant according to Claim 10 which is used to regenerate the cementum.
- [12] The transplant according to Claim 10 or 11 which is

used to regenerate the periodontal ligament.

[13] The transplant according to any one of Claims 10-12 which is used to regenerate the alveolar bone.

[14] The transplant according to any one of Claims 10-13
5 which is used to prevent the apical invasion of gingival epithelium along the dental root surface.

[15] The transplant according to any one of Claims 10-14 which is used to regenerate the dental pulp.

[16] The transplant according to any one of Claims 10-15
10 which is used to enhance the production of repaired dentin in the pulp cavity.

[17] The transplant according to any one of Claims 10-16 wherein the neurotrophic factor is a brain-derived neurotrophic factor, a nerve growth factor, neurotrophin-3,
15 or neurotrophin-4/5.

[18] A method for regenerating the periodontal tissue which comprises using a neurotrophic factor.

[19] The regenerating method according to Claim 18 which regenerates the cementum.

20 [20] The regenerating method according to Claim 18 which regenerates the periodontal ligament.

[21] The regenerating method according to Claim 18 which regenerates the alveolar bone.

[22] The regenerating method according to Claim 18 which
25 prevents the apical invasion of gingival epithelium along the dental root surface.

[23] The regenerating method according to Claim 18 which regenerates the dental pulp.

[24] The regenerating method according to Claim 18 which enhances the production of repaired dentin in the pulp cavity.

[25] The regenerating method according to any one of
5 Claims 18-24 wherein the neurotrophic factor is a brain-derived neurotrophic factor, a nerve growth factor, neurotrophin-3, or neurotrophin-4/5.

[26] A repaired dentin morphogenesis enhancer which comprises a neurotrophic factor as an active ingredient.

10 [27] The repaired dentin morphogenesis enhancer according to Claim 26 wherein the neurotrophic factor is a brain-derived neurotrophic factor, a nerve growth factor, neurotrophin-3, or neurotrophin-4/5.

[28] A therapeutic method for pulpal disease which
15 comprises administering a therapeutically effective amount of a neurotrophic factor to a subject who is suffering or prone to suffer from the disease in order to enhance the morphogenesis of repaired dentin.

[29] The method according to Claim 28 wherein the
20 neurotrophic factor is a brain-derived neurotrophic factor, a nerve growth factor, neurotrophin-3, or neurotrophin-4/5.